# White Paper

## Library Design Thinking in the Digital Age:
Designing for the Past, Present, and Future of the Modern Library

**C2AE architecture | engineering**  
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Green Roof at Hastings Public Library
The status of the library as a place for community learning and growth is paramount to the continuation of libraries through the digital age. Though the way that patrons access materials, and the materials they are accessing may be changing and have changed significantly in the past three decades, the structure of a library, physically and socially, has been able to move to meet the needs of their communities. However, libraries should not only bend and move to fit the digital age, they should find a way to thrive within it. This can be done once the focus is redetermined to place emphasis on the role of a library in the community as a “place” that is intrinsic to the community. It is a goal that can be readily achieved in a manner of ways, from content availability, to function, to physical structure.

There has been much assessment as to how evolution in library material and management can render public libraries obsolete. Primitive libraries placed value on having a large collection in a grandiose structure (Nolin & Soderholm, 246). This is apparent in the history of library architecture. Great architectural structures like the George Peabody Library in Baltimore, Maryland, have been foregone for functionality and accessibility. Donald Thompson aptly described this change, at the tipping point of library development for functionality, in his article, *A History of Library Architecture: A Bibliographical Essay* (1969):

“The evolution of library construction is traced chronologically by reference to the famous libraries of the world and the cause for change is related to the form of the books, the changing use of the books, increasing numbers of books, and changes in architecture and artistic adornment.” (p. 134).

Nearly 45 years later, while the sentiment is the same, the number of books available is astronomical, architecture has shifted to a postmodern look at functionality, and books are available in numerous forms - however all very much accessible through the internet. Libraries have been able to weather this shift by offering extensive online collections. However, what does that mean for the physical library?

**Collection and Community**

It can and should be maintained that the structure of a library is as important today as it was in the time before the accessibility of the internet. “The development of the library is defined by profound structural and professional change, not merely by shifting focus from paper to information.” (Nolin and Soderholm, 246). Presently, contemporary libraries are rooted in their ability to provide information, not necessarily in the form of a physical book. This does not
mean, however, that a library should be diminished to an information-source, with the only goal being to serve customers (Nolin and Soderholm, 247). That would render libraries a victim to the impersonal characteristics of the digital age. There has to be an ability for libraries to be a willing information-source, while focusing on developing and building community. Libraries are a key asset to their communities in their ability to function as a “third place.”

Offering a variety of digital and physical materials creates a divide in the view of the “place” of a library. Some patrons will view their library as a link on the internet, where they are able to go and checkout material, all while many miles away from a physical library. Other patrons will view the library as the place itself, a place where community can gather to investigate all realms of information. As Nolin and Soderholm explain in *The Public Library as a Place of Borrowing* (2015), “There is increasing interest in the library as a place, tangibly in terms of architecture, socially as the ‘placeness’ quality of the situated library.” (p. 248). The library can and should act as a “third place,” in the community. It is not the patron’s home, school, or work, it is an extension of those places that results in a singular place where the entirety of a diverse community can gather (Nolin and Soderholm, 248). It is a veritable nucleus of societal interaction and information supply. That socially prescribed purpose requires a deeper level of design understanding to support the physical mission. The physical mission must address not only the onsite collection, but to maintain relevance and propriety, must allow for support and promotion of library services (Nolin and Soderholm, 249). The library is no longer a home to a collection of books and other materials, it is an incubator for community growth and development.

Patrick Carr describes the role of the library in community most appropriately in *Reimagining the Library as a Technology: An Analysis of Ranganathan’s Five Laws of Library Science within the Social Construction of Technology Framework* (2014):

“First consider [Ranganathan’s] final law: the library is a growing organism...The library’s functionality should be reflective of the expectation of its user community.” (p. 159). Nolin and Soderholm (2015) further this point by allowing that libraries should be viewed a service to the community, similar to so many of the other services in communities (p.254). They are a place for community involvement and leadership.

This is not to say that the collection should be downplayed in any way, rather that the social interactions that take place should support the collection and the community. A workshop on financial strategies when planning to buy a home will lead to books, journals, articles, e-books, audiobooks, etc., being checked out by patrons, and maintaining their status as stakeholders in the physical library enterprise. Similarly, that workshop would support the library collection while supporting the role of the library as a community service. The ability to do both must be the intent of a modern library, and the structure of the library can and has to be built to support that objective.
Designing library space with the intention of community support is a guiding factor in modern library planning. “It is a place built around a collection and a collection built around a place, an ongoing process most clearly embodied by the neighborhood branch library. This process is one that is...owned by the community...” (Nolin and Soderholm, 257). Therefore, design thinking must go forth with the intention of community growth in mind.

Modern Library Design: Renovation vs. Reconstruction

Design thinking is essential to library design. It encourages a broader approach to solving problems that so many libraries face, the most prominent being the digitization of collections. However, the most important of these changes comes in terms of patron usage patterns, library media, and general library expenditure. By approaching the renovation of a library or reconstruction/new build using a design-oriented thinking, libraries will be able to approach their space with a multi-disciplined and integrated approach that will support their futures.

Any renovation or new build has to take into account the use of a library as a “third place.” Functioning as an essential community place between home, work, and school, this “third place,” requires a high level of community-driven innovation that will develop the space in a way that fits the needs of an individual.
community. A space that is innovatively designed will not be the same across all communities; however by creating with the community needs in mind, relevance in the community will be exponentially prolonged.

Design charrettes, or “Design Workshops,” are essential to the process of creating space for the community. They are used in a variety of fields but are founded in architectural design. Charrettes allow for collaboration between the architect/designer, library staff, and the community - ensuring that the designers have the best possible understanding of the goals of the institution and the needs of the staff and community members. By having this information in mind, the design will become better-rounded. In studying “participatory action research,” or PAR (a category in which design charrettes belong) at the University of Colorado, Denver for the Auraria Library, Howard and Somerville found the following regarding hosting design charrettes for library expansion in their article, *A Comparative Study of Two Design Charrettes: Implications for Codesign and Participatory Action Research*:

“Design charrettes...ensure the authenticity of the process of ‘designing with’ rather than ‘designing for’...design charrettes through their foundation of making created a learning environment for participants to build shared understanding and co-create design outcomes.” (p.61).

Design charrettes are especially pertinent when working with a renovation, because creating within occupied space requires innovative thinking, which can frequently come from community members and staff who are ultra-familiar with the space. Charrettes are also imperative to creating wayfinding through the library. The most pertinent way for the architect to understand how staff and patrons move through the space, and the benefits and hindrances of their current movement path, is by learning and watching them utilize the space in a charrette. By having an early understanding of the necessary wayfinding measures within the space, the architect can better design an intuitive space.

Designing new space does not require a new building. It is more than possible to create within a currently occupied space. An existing library, whether an existing building, aging library, or storefront is only a shell. The innovative design-thinking between staff, community members, and the architect will allow a new creation to take light on an entirely new level. There is little that is impossible when renovating if the foundation is strong.

We recognize with modern library design that the building should be comprised of a steel frame with the minimum amount of load bearing walls, internally and externally, to allow for reconstruction of space for future needs. With the core frame, it is possible to incorporate simple stud partition walls when needed, with minimal structural influence, and as time proves them necessary or unnecessary, to remove or reorder them.
However, with current design trends, it is also possible to have a renovation with very few structural changes, relying mostly on interior design. Sliding walls, folding walls, accordion partitions, and disappearing walls (garage-style walls that slide into the ceiling) offer flexibility of space. With this technology, for example, four separate reading rooms can become one large meeting room for community meetings or seminars. Using these partitions could create barriers between teen and children’s sections, if there seemed to be too much crossover between the groups. Then, with the use of varied interior schemes, more distinction between the two areas can be created.

The most preponderant piece of library design thinking is to maintain the library aesthetic without being held to traditional library convention. When the time is dedicated early in the process where decisions, changes, and planning are completed, the cost can be significantly mitigated and create straightforward changes in the future of the library.

**Conclusion**

In the digital age it can be difficult for information-based institutions to stay relevant. There is huge competition for patron attention and it can be difficult for libraries to keep up with the myriad of other proponents vying for information-based attention. The way for libraries to set themselves apart from the constant stream of information is for them to focus their efforts on creating a space that supports community, while finding ways for the community to support the collection.
In this way, there is a high level of importance placed on the role of the community in the design of library spaces. There needs to be an understanding within the community that the library is not only a place for them to continue to gather information, but also to support their needs by reimagining the library as a function to specifically further community development.

Ergo, when developing space for community members, they must be intrinsically involved in the design-thinking that is required for reimagining current library space or inventing new spaces. This is done by hosting design charrettes with community members and library staff to allow them to dictate to the architect their feelings on high-level designs for their library, allowing the architect to design with them, not for them.

Charrettes also allow for the architect to aid in redevelopment of space with a priority of design goals readily available to guide design. New structures should be designed with a steel frame to allow for maximum movability in the future of the space. Renovations can be completed with minimum effects to the base of the library structure using moveable walls and interior design.

In any event, the space needs to be flexible for the future of the library. Libraries have been able to move and flex through the rise of the digital age, and regardless of what innovations come in the next era, they need to be able to economically continue to move with the times.

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References

